

Appln No. 09/922,001

Amdt date April 11, 2005

Reply to Office action of December 14, 2004

REMARKS/ARGUMENTS

Claims 27-46 are pending. Claims 1-26 are cancelled and new claims 27-46 are added.

The drawings are objected in that they do not have labels on the boxes. The Examiner refers specifically, but not limited to, boxes 116, 118, 120, 122, etc., in FIG. 2. Applicants respectfully submit that the drawings are in compliance with 37 CFR 1.84 and MPEP 608.02 V. For example, the "boxes" 116, 118, 120, 122, in FIG. 2 are clearly identified and described in the specification. For instance, element 116 is described as "laser sources," element 118 as a "passive CWDM component," element 120 as a "thermoelectric device," and element 122 as a "monitor unit." See specification, page 6, second paragraph.

In fact, there is virtually no space, for example in "boxes" 120 and 122 of FIG. 2 to include descriptions of a "thermoelectric device," and a "monitor unit." Moreover, Applicants respectfully submit that including the sometimes long descriptions of the elements will unnecessarily complicate the drawings and make them more difficult to understand. In view of the above remarks, it is respectfully requested that the above objections to the drawings be withdrawn.

Claims 9, 17 and 18 are objected to on minor formal grounds. Claims 9, 17 and 18 are cancelled, therefore, withdrawal of the above objections is respectfully requested.

Appln No. 09/922,001

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Claim 25 is rejected under 35 U.S.C. 102(b) as being fully anticipated by Swaminathan et al. 5,717,712; claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Dudley EP 0991217 in view of Okazaki et al. 6,285,479; claim 24 is rejected 35 U.S.C. 103(a) as being obvious over Dudley in view of Okazaki et al. and Cohen et al. 6,657,723; and claims 1-8, 10-13, 15-18, 20, 21 and 26 are rejected as being obvious over Yamane et al. 6,295,147 in view of Swaminathan et al. and Okazaki et al.. Also, claim 14 is rejected 35 U.S.C. 103(a) as being obvious over Yamane et al. in view of Swaminathan et al. and Okazaki et al. as applied to claim 13 above, and further in view of Kasper et al. 5,740,191; and claim 19 is rejected as being obvious over Yamane et al. in view of Swaminathan et al. and Okazaki et al. as applied to claim 2 above and further in view of Dudley. Applicants submit that all of the remaining claims in this application are patentable over the cited references, and reconsideration of the rejections and allowance of this application are respectfully requested.

New independent claim 27 includes among other limitations, "a common active temperature controlling element thermally coupled to the plurality of laser sources of the CWDM laser array, wherein the common active temperature controlling element maintains a controlled temperature environment around the plurality of laser sources of the laser array to maintain wavelength drifts of the plurality of laser sources to be less than a CWDM wavelength spacing of the CWDM network while the CWDM add/drop multiplexer structure is subjected to an outside

Appln No. 09/922,001

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temperature ambient experienced in an Outside plant (OSP) situation."

Applicants respectfully submit that none of the cited references, alone or in combination, teach or disclose all of the above limitations defined in new claim 27.

For example, Yamane (US 6,295,147) describes controlling the temperature of each single laser using individual thermo electric coolers to stabilise a temperature of each individual laser. (See, Abstract and FIGs. 8 and 9). However, Applicants respectfully submit that there is no suggestion or motivation in Yamane that would lead a person skilled in the art to implement "a common active temperature controlling element thermally coupled to the plurality of laser sources of the CWDM laser array," as defined in new claim 27.

Indeed, it is significant to note that none of the many modifications described in Yamane replaces or modifies the individual control of each disclosed single laser using respective thermo electric coolers directly coupled to the respective individual laser sources. In other words, in contrast to the present invention, there is no recognition in Yamane, and indeed in none of the other cited references, that a precise control over each individual laser is not necessary. In the present invention, "a common active temperature controlling element thermally coupled to the plurality of laser sources of a CWDM laser array" can instead be utilised, and "a controlled temperature environment around the plurality of laser sources" is maintained "to maintain wavelength drifts of the plurality of

Appln No. 09/922,001

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laser sources to be less than a CWDM wavelength spacing," in an "OSP situation," as claimed in new claim 27. Consequently, independent claim 27 is patentable over Yamane.

Moreover, Applicants respectfully submit that a skilled person having read Yamane would not be motivated to modify the disclosure in Yamane so as to arrive at the invention recited by the new claim 27, without exercising a non-obvious step.

Similarly, Swaminathan (US 5,717,712), which discloses a Hybrid Fibre Coaxial (HFC) system with sub-carrier multiplexing requiring a very linear response, which is temperature dependent (e.g., col. 2, lines 36-54), does not disclose the limitations of the new claim 27, discussed above with reference to Yamane. Furthermore, in relation to an HFC system and not to a CWDM system, Applicants respectfully submit that a person skilled in the art would not have turned to Swaminathan in seeking in any modification of Yamane, without exercising a non-obvious step.

Regarding Okazaki (US 6,285,479), Applicants respectfully submit that the limitations of the new claim 27, discussed above with reference to Yamane are not disclosed or suggested in that document.

As a result, the new independent claim 27 is patentable over the cited references. Claim 46 also includes all of the limitations of claim 27, Therefore, claim 46 is also patentable over the cited references. Dependent claims 28-45 depend directly or indirectly from claim 27 and are allowable as is claim 27, and for additional limitations recited therein.

Appln No. 09/922,001

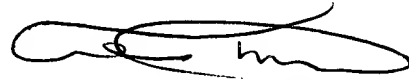
Amdt date April 11, 2005

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In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By



Raymond R. Tabandeh
Reg. No. 43,945
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